

Notice of Allowability

Application No.

09/883,208

Examiner

Phuoc H. Nguyen

Applicant(s)

COULOMBE ET AL.

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to December 20, 2005.
2. ☒ The allowed claim(s) is/are 1-3,6,9,10,15-23,27,28,31-36,39 and 42-59.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/30/01, 04/03/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date September 20, 2005.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.



**JEFFREY PWU
PRIMARY EXAMINER**

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steve Chang (Reg. No. 42,402) on December 20, 2005.

Claims have been amended as follow:

Claims 1, 22, 35, 36, 45, 49, and 59 have been amended as follows:

Claim 1 (currently amended): A method to measure a perceived bit rate between a client and a server, the method comprising:

(1) identifying at least one transaction unit, said transaction unit including one or more message pairs;

(2a) if said transaction unit has only a single message pair, confirming that said single message pair does not overlap other message pairs outside of the transaction unit;

(2b) if said transaction unit has a plurality of message pairs, confirming that said message pairs are overlapping;

(3) measuring a number of bits transmitted between the client and the server over a duration of said at least one transaction unit, wherein said measuring is performed at an

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application level within the client, such that a perceived bit rate is measured for a plurality of applications executing on the client; and

(4) adapting, by the server, a type of content to be sent to the client based on a measurement determined during act (3).

Claim 22 (currently amended): A machine-readable medium having recorded thereon instructions for a processor, the instructions comprising:

(1) identifying at least one transaction unit, said transaction unit including one or more message pairs;

(2a) if said transaction unit has only a single message pair, confirming that said single message pair does not overlap other message pairs outside of the transaction unit;

(2b) if said transaction unit has a plurality of message pairs, confirming that said message pairs are overlapping;

(3) measuring a number of bits transmitted between a client and a server over a duration of said at least one transaction unit, wherein said measuring is performed at an application level within the client, such that a perceived bit rate is measured for a plurality of applications executing on the client; and

(4) adapting, by the server, a type of content to be sent to the client based on a measurement determined during act (3).

Claim 35 (currently amended): An apparatus for measuring a perceived bit rate between the apparatus and a second apparatus, the apparatus comprising:

a bit rate measurer to measure a number of bits transmitted between the apparatus and the second apparatus over a time period; and

an adapter to adapt a type of content to be sent to the second apparatus based on a measurement determined by the bit rate measurer, wherein:

the number of bits measured are those included only within at least one transaction unit, wherein said at least one transaction unit has one or more transaction pairs that do not overlap with transaction pairs outside of the transaction unit, and wherein if said transaction unit has a plurality of transaction pairs, said plurality of transaction pairs are overlapping, and

the time period is a sum of time durations of each of the at least one transaction unit, wherein the bit rate measurer is arranged to measure the bit rate at an application level within the first apparatus, such that a perceived bit rate is measured for a plurality of applications executing on the first apparatus.

Claim 36 (currently amended): The apparatus of claim 35, wherein the apparatus functions as a server and the second apparatus functions as a client and the duration of said at least one transaction unit is an amount of time from a beginning of a transmission, from the server, of a first response within the respective transaction unit to a time of a receipt, by the server, of a last acknowledgement within the respective transaction unit.

Claim 45 (currently amended): A system for measuring a perceived bit rate, comprising:

a first apparatus configured to function as a server and including an adaptor; and

a second apparatus configured to function as a client comprising:

a bit rate measurer to measure a number of bits transmitted between the second apparatus and the first apparatus over a predetermined time period, wherein:

the adaptor is configured to adapt a type of content to be sent to the second apparatus based on a measurement determined by the bit rate measurer,

the number of bits measured are those included only within at least one transaction unit, wherein said at least one transaction unit has one or more transaction pairs that do not overlap with transaction pairs outside of the transaction unit, and wherein if said transaction unit has a plurality of transaction pairs, said plurality of transaction pairs are overlapping, and

the time period is a sum of time durations of each of the at least one transaction unit, wherein the bit rate measurer is arranged to measure the bit rate at an application level within the client, such that a perceived bit rate is measured for a plurality of applications executing on the client.

Claim 49 (currently amended): A mobile terminal for sending and receiving data wirelessly, the mobile terminal comprising:

a bit rate measurer to measure a number of bits transmitted between the mobile terminal and a server over a time period, wherein:

the number of bits measured are those included only within each of a plurality of transaction units, wherein said transaction units each have one or more transaction pairs that do not overlap with transaction pairs outside of the transaction unit, and wherein if said transaction unit has a plurality of transaction pairs, said plurality of transaction pairs are overlapping,

the time period is a sum of time durations of each of the transaction units, and
the bit rate measurer is arranged to measure the bit rate at an application level within the mobile terminal, such that a perceived bit rate is measured for a plurality of applications executing on the mobile terminal.

Claim 59 (currently amended): An apparatus for measuring a perceived bit rate between the apparatus and a second apparatus, the apparatus comprising:

a bit rate measurer to measure a number of bits transmitted between the apparatus and the second apparatus over a time period; and

a bit rate reporter to report the bit rate to the second apparatus, functioning as the server, the bit rate being based on a measurement determined by the bit rate measurer, wherein:

the number of bits measured are those included only within at least one transaction unit, wherein said at least one transaction unit has one or more transaction pairs that do not overlap with transaction pairs outside of the transaction unit, and wherein if said transaction unit has a plurality of transaction pairs, said plurality of transaction pairs are overlapping;

the time period is a sum of time durations of each of the at least one transaction unit, and the bit rate measurer is arranged to measure the bit rate at an application level within the first apparatus, such that a perceived bit rate is measured for a plurality of applications executing on the first apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H Nguyen
Examiner
Art Unit 2143

December 21, 2005



JEFFREY PWU
PRIMARY EXAMINER